

**Notice of Allowability**

Application No.

10/706,742

Applicant(s)

VAN RIETSCHOTE ET AL.

Examiner

Hashem Farrokh

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/12/07.
2. ☒ The allowed claim(s) is/are 3,4,6-12,14-18,21-25,27 and 30-38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

**PART I**                    **THE EXAMINER'S EVALUATION OF THE APPLICATION**

**SECTION A**            **RELEVANT ART CITED BY THE EXAMINER**

1.     U. S. Patent Publication No. 2004/0268340 A1 to Steeb et al. describes *Managing multiple devices on which operating systems can be automatically deployed.*
2.     U. S. Patent Publication No. 2003/0126242 A1 to Chang describes *Network boot system and method using remotely-stored, client-specific boot images created from shared, base snapshot image.*
3.     U. S. Patent No. 6,421,777 B1 to Pierre-Louis et al. describes *Method and apparatus for managing boot images in a distributed data processing system.*
4.     U. S. Patent No. 6,799,316 B1 to Aguilar et al. describes *Virtualizing hardware with system management interrupts.*

**SECTION B**            **DISTINGUISHING FEATURES RECITED IN THE CLAIMS**

The following is an Examiner's Statement of Reasons for Allowance See **MPEP 1302.14**

5.     The primary reasons for allowance of independent claims 3-4 and 6 in the instant application is the combination with the inclusion of following limitations: check a first storage from which the computer system is configured to boot for a block identified in the read, wherein the block is included within the image of the set of software resources; detect an initialization of a device driver for the first storage within the virtual machine, the device driver coded to perform (a), (b), and (c) in

response to read requests to the first storage; and exit the virtual machine in response to detecting the initialization.

6. *The primary reasons for allowance of independent claims 7-9 and 14-16 in the instant application is the combination with the inclusion of following limitations: check a first storage from which a computer system is configured to boot for a block identified in a read request generated on the computer system, receive one or more additional blocks from the image repository system, wherein the one or more additional blocks are received independent of read requests generated in the computer system and received by the device driver.*

7. *The primary reasons for allowance of independent claims 10-12 in the instant application is the combination with the inclusion of following limitations: check a first storage from which a computer system is configured to boot for a block identified in a read request generated on the computer system, receive a request from the image repository system for modified blocks within the image; identify modified blocks within the map; and transmit the modified blocks to the image repository system.*

8. *The primary reasons for allowance of independent claims 17-18 and 21-23 in the instant application is the combination with the inclusion of following limitations: store a block identified in a write request generated within a computer system to a first storage from which the computer system is configured to boot, transmit the block to the image repository system; receive an acknowledgement from the image repository system corresponding to the block; and record that the block is not*

**updated with respect to the image stored in the image repository system responsive to the acknowledgement.**

9. *The primary reasons for allowance of independent claims 24-25 and 27 in the instant application is the combination with the inclusion of following limitations: **store a block identified in a write request generated within a computer system to a first storage from which the computer system is configured to boot, transmit the block to the image repository system; receive an acknowledgement from the image repository system corresponding to the block; and record that the block is not updated with respect to the image stored in the image repository system responsive to the acknowledgement.***

10. *The primary reasons for allowance of independent claims 30-34 in the instant application is the combination with the inclusion of following limitations: **wherein the image repository system is coupled to receive the remote boot request, and wherein the image repository system is configured to detect that the computer system is to be provisioned with the set of software resources, and wherein the image repository system is configured to respond to the remote boot request with a program which, when executed by the computer system, initiates execution of the set of software resources prior to at least some blocks in the image being copied to the computer system.***

11. *The primary reasons for allowance of independent claims 35-38 in the instant application is the combination with the inclusion of following limitations: **wherein the computer system is configured to execute the set of software resources, and***

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**wherein the computer system is configured to track which blocks in a first storage from which the computer system is configured to boot and which correspond to the image are updated with respect to the image stored on the image repository computer system, the updates generated by the computer system during execution of the set of software resources.**

*The prior art of record including the disclosures of Steeb et al. (2004/0268340 A1), Chang (2003/0126242 A1), Pierre-Louis et al. (6,421,777 B1), and Aguilar et al. (6,799,316 B1), neither anticipates nor renders obvious the above recited combination.*

*Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays should be clearly labeled "Comments on Statement of Reasons for Allowance"*

## **PART II                      THE ATTENTION OF FUTURE CORRESPONDENT**

*Any inquiry concerning this communication should be directed to Hashem Farrokh whose telephone number is (571) 272-4193. The examiner can normally be reached Monday-Friday from **8:00 AM to 5:00 PM.***

*If attempt to reach the above noted Examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Donald A Sparks, can be reached on (571) 272-4201. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published*

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*application may be obtained from either private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBS) at 866-217-9197 (toll-free).*

*HF*

HF

2007-03-18

*Brian R. Peugh*  
Brian R. Peugh  
Primary Examiner  
*3/18/07*